United States Environmental Protection Agency | Office of Solid Waste and Emergency Response (5104) | March 1998 550-F-98-003

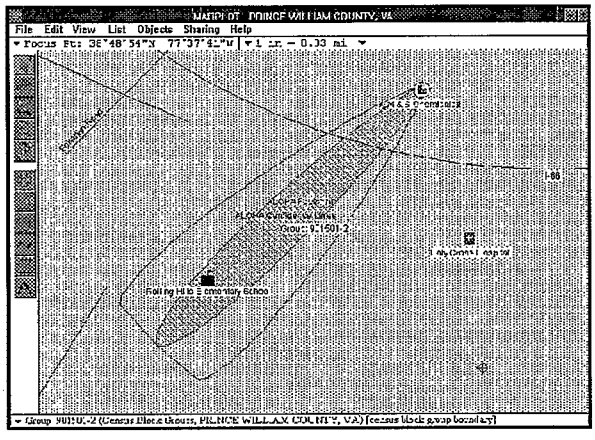
EPA CEPPO

CAMEO®

Computer-Aided Management of Emergency Operations

FACTSHEET

CAMEO® is a system of software applications used widely to plan for and respond to chemical emergencies. It is one of the tools developed by EPA's Chemical Emergency Preparedness and Prevention Office (CEPPO) and the National Oceanic and Atmospheric Administration (NOAA) to assist front-line chemical emergency planners and responders. They can use CAMEO to access, store, and evaluate information critical for developing emergency plans. In addition, CAMEO supports regulatory compliance by helping users meet the chemical inventory reporting requirements of the Emergency Planning and Community Right-to-Know Act (EPCRA, also known as SARA Title III). CAMEO also can be used with a separate software application called LandView™ III to display EPA environmental databases and demographic/economic information to support analysis of environmental justice issues.



The CAMEO system integrates a chemical database and a method to manage the data, an air dispersion model, and a mapping capability. All modules work interactively to share and display critical information in a timely fashion. The CAMEO system is available in Macintosh, Windows, and DOS formats.

ORIGIN

CAMEO initially was developed because NOAA recognized the need to assist first responders with easily accessible and accurate response information. Since 1988, EPA and NOAA have collaborated to augment CAMEO to assist both emergency responders and planners. CAMEO has been enhanced to provide emergency planners with a tool to enter local information and develop incident scenarios to better prepare for chemical emergencies. The Bureau of Census and the U.S. Coast Guard have worked with EPA and NOAA to continue to enhance the system.

Why was CAMEO created?

Rapid action by firefighter, police, and other emergency response personnel often is severely hampered by lack of accurate information on the substance spilled and safe response actions. Emergency planners lack a tool to store and easily use information that is essential for emergency planning.

Who Uses CAMEO?

- Firefighters
- State Emergency Response Commissions (SERCs) and Tribal Emergency Response Commissions (TERCs)
- Local Emergency Planning Committees (LEPCs)
- Industry
- Schools
- Environmental Organizations
- Police Departments

What is in CAMEO®?

CAMEO is actually a suite of three separate, integrated software applications:

- CAMEO
- MARPLOT
- ALOHA

CAMEO® - The Database and Information Management

The original application called CAMEO, contains a chemical database of over 4,000 hazardous chemicals, 50,000 synonyms, and product trade names. CAMEO provides a powerful search engine that allows users to find chemicals instantly. Each one is linked to chemical-specific information on fire and explosive hazards, health hazards, firefighting techniques, cleanup procedures, and protective clothing. CAMEO also contains basic information on facilities that store chemicals, on the inventory of chemicals at the facility (Tier II) and on emergency planning resources. Additionally, there are templates where users can store EPCRA information. CAMEO connects the planner or emergency responder with critical information to identify unknown substances during an incident.

MARPLOT® - Mapping Applications for Response, Planning, and Local Operational Tasks

MARPLOT is the mapping application. It allows users to "see" their data (e.g., roads, facilities, schools, response assets), display this information on computer maps, and print the information on area maps. The areas contaminated by potential or actual chemical release scenarios also can be overlaid on the maps to determine potential impacts. The maps are created from the U.S. Bureau of Census TIGER/Line files and can be manipulated quickly to show possible hazard areas.

ALOHA® - Areal Locations of Hazardous Atmospheres

ALOHA is an atmospheric dispersion model used for evaluating releases of hazardous chemical vapors. ALOHA allows the user to estimate the downwind dispersion of a chemical cloud based on the toxicological/physical characteristics of the released chemical, atmospheric conditions, and specific circumstances of the release. Graphical outputs include a "cloud footprint" that can be plotted on maps with MARPLOT to display the location of other facilities storing hazardous materials and vulnerable locations such as hospitals and schools. Specific information about these locations can be extracted from CAMEO information modules to help make decisions about the degree of hazard posed.

Hardware/Software Requirements

CAMEO for Windows
IBM or Compatible 486 (Pentium recommended)
Microsoft Windows 3.1 or Windows 95
VGA Color Monitor
8 MB RAM (16 MB recommended)
30 MB free hard disk space
CAMEO for MAC 4.5
Hypercard
5 MB RAM, System 7.x
20 MB free hard disk space
Math co-processor for ALOHA (not required for Power PCs)

Ordering CAMEO

For more information on ordering CAMEO or the CAMEO Today newsletter, on CAMEO training, or for free CAMEO software for local governments, contact:

The National Safety Council (NSC)
800-99CAMEO
(800-992-2636)
or visit the NSC website at:
www.nsc.org/ehc/cameo.htm

Contacts

For more information on emergency preparedness, planning and prevention programs mentioned in this factsheet contact:
Emergency Planning and Community Right-to-Know Hotline
Monday through Friday
9 am to 6 pm EST
(800) 424-9346
(703) 412-9810
(800) 535-7672 TDD

Or

Visit the EPA CEPPO website at:
www.epa.gov/swercepp

Other Planning/Response Tools

LandView™ III - software that provides federal environmental and census data on maps

Chemical Reactivity Worksheet - provides information about the reactivity of 4,300 chemicals or mixtures of chemicals

RMP Calculator - a software program that calculates vulnerable zone distances based on the Risk Management Program (RMP) Guidance for Offsite Consequence Analysis